

REMARKS/ARGUMENTS

Claims 26-53 are active in this application. Claims 26-28, 30, 32-41, and 46-53 are readable on the elected specie, i.e., the previous withdrawn claims: 5, 7 and 18 correspond to new Claims 29, 31, and 42-45.

Claims 1-25 have been represented as Claims 26-53 to avoid printing errors when the claims are published in the issued patent. Claim 26 corresponds to original Claims 1 and 2. Claims 27-52 correspond to Claims 3-25. Support for Claim 53 is found on page 4, line 28. The objections to the claims and the rejections under 35 U.S.C. § 112, second paragraph are obviated by the cancellation of Claims 1-25.

A substitute Abstract is also attached hereto.

No new matter is added.

The rejection of Claims 1-4, 6, 8-17, and 19-25 under 35 U.S.C. § 102(b) over Torgerson (U.S. patent no. 5,730,966) is obviated by the cancellation of the claims. As this rejection may apply to Claims 26-53, now pending, the rejection is untenable for the following reasons.

The Examiner is of the opinion that Torgerson describes the claimed polymer relying on the description in Torgerson of an "A" monomer that can be acrylic acid (col. 8, line 17) and a "B" monomer that can be a vinylcaprolactam (col. 10, line 25).

For Torgerson to anticipate the claimed subject matter the disclosure of Torgerson must allow one of ordinary skill to "at once envisage" the claimed invention. *In re Petering* 133 USPQ 275 (CCPA, 1962). Since the claimed invention cannot be at once envisioned from Torgerson, the claims are not anticipated by Torgerson.

Torgerson simply does not describe, with sufficient specificity, the selection of vinylcaprolactam as an LCST unit and combining it with a water-soluble unit as claimed.

Torgerson generically describes each monomer and the combinations that would result from selecting any particular monomer from each group is enormous (see cols. 2-3 and 8-9).

There is simply no direction in Torgerson to select polymers that control "rheology of aqueous compositions as a function of temperature, while at the same time maintaining a certain level of transparency for the composition" (see page 4, lines 17-22). Rather, Torgerson is concerned with selecting monomers based on different polymer properties, i.e., flexibility, elasticity, solubility, glass transition temperatures ( $T_g$ ), molecular weights, and strength, which are properties useful for hair styling compositions (see col. 1, line 64 to col. 2, line 3; and col. 4, lines 54-55).

More specifically, Torgerson is concerned with preparing and utilizing graft copolymers:

The present invention relates to a water or alcohol soluble or dispersible thermoplastic elastomeric copolymer having a **backbone and two or more polymeric pendant side chains . . .** (col. 2, lines 37-39, emphasis added).

The copolymers of the present invention, can also be referred to as "**graft copolymers**" because they can be prepared from the copolymerization of monomer units and macromonomer units. ***In other words, the macromonomer is "grafted" or incorporated into the copolymer.*** (col. 4, lines 59-63, emphasis added).

Further, Torgerson describes the graft copolymers as:

characterized in having an elastomeric or flexible backbone and rigid, thermoplastic, hydrophilic side chains. (col. 4, lines 55-56)

Claim 26 (combination of original Claims 1 and 2) define the polymer in two alternative ways:

- (1) "the polymer is a block polymer comprising water-soluble blocks alternating with LCST blocks" or

- (2) a graft copolymer whose backbone is formed from water-soluble units and bears LCST grafts”

Concerning the first option in Claim 26, clearly a block copolymer with alternating units of water-soluble and LCST blocks is clearly different than the grafted polymers described by Torgerson. Therefore, even if one could simply pick and choose the appropriate monomers, the monomers would not be arranged as in the present claims following the description in Togerson.

Concerning the second option in Claim 26, i.e., water-soluble backbone with LCST grafts (see also page 6, lines 5-8 of the application), this polymer is certainly not described in Torgerson because at col. 5, line 48-62 Torgerson describes:

**The copolymers of the present invention are formed from the copolymerization of randomly repeating A and B units . . . In typical embodiments of these copolymers, the backbone is primarily derived from the ethylenically unsaturated portion of the A monomer unit and the ethylenically unsaturated portion of the B macromonomer unit. *The side chains are derived from the non-copolymerized portions of the macromonomer.***

Further, Torgerson describes that the water-soluble monomers that impart the polymer with water-solubility, see again col. 4, lines 55-56 of Torgerson: “an elastomeric or flexible backbone and rigid, thermoplastic, hydrophilic side chains.”

There is also no direction in Torgerson to specifically select N-vinylcaprolactam as a unit with an LCST unit relative to any of the numerous possible options Togerson suggests.

Finally, Togerson provides no indication whatsoever to select a polymer with the above criteria AND also include LCST units in an amount from 5 to 70% by weight in the polymer.

As stated above, Torgerson must disclose a more specific, limited teaching to those polymers as claimed, *In re Petering, supra*; see also *In re Ruschig*, 145 U.S.P.Q. 274 (CCPA 1965). Torgerson is silent with respect to selecting those polymers as claimed and thus does not provide an anticipating disclosure to present claims.

On this basis, Applicants request withdrawal of the rejection over Togerson.

Priority

Applicant points out that a certified copy of the French priority application was submitted to the International Bureau in the PCT application from which the present 371 application was filed (see Applicant's Request for Priority filed March 13, 2002).

Applicants request allowance of this application. Early notice of such allowance is also requested.

Respectfully submitted,

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